Project Initialization and Planning Phase

Date	10 March 2025
Team ID	LTVIP2025TMID26675
Project Title	Visualization Tool for Electric Vechicle Charge and Range Analysis
Maximum Marks	3 Marks

Project Proposal (Proposed Solution) template

This project proposal outlines a solution to address a specific problem. With a clear objective, defined scope, and a concise problem statement, the proposed solution details the approach, key features, and resource requirements, including hardware, software, and personnel.

Project Overview	
Objective	Develop a tool to visualize EV charging patterns and range efficiency.
Scope	Analyze EV charging data, battery performance, and range optimization.
Problem Statement	
Description	Limited insights into EV charging behavior and range.
Impact	Helps users optimize charging and policymakers improve infrastructure.
Proposed Solution	
Approach	Data processing , visualization, and interactive dashboard.
Key Features	Charging trend analysis, range optimization, and web integration.

Resource Requirements

Resource Type	Description	Specification/Allocation
Hardware		
Computing Resources	CPU/GPU specifications, number of cores	4-core CPU
Memory	RAM specifications	8GB RAM
Storage	Disk space for data, models, and logs	500GB SSD
Software		
Frameworks	Python frameworks	Python (pandas, Matplotlib, Seaborn).
Libraries	Additional libraries	Tableau
Development Environment	IDE, version control	Flask/Django
Data		
Data	Source, size, format	EV charging dataset from Kaggle or government sources